



September 21, 2005

VIA ELECTRONIC MAIL

US. Department of Energy (economic.dispatch@hq.doe.gov)
Joe Eto (jheto@lbl.gov)
Alison Silverstein (alisonsilverstein@mac.com)

**Re: United States Department of Energy, Economic Dispatch Study
Responses of Constellation Energy Commodities Group, Inc. and
Constellation Generation Group, Inc.**

Dear Mr. Eto and Ms. Silverstein:

Attached are the responses of Constellation Energy Commodities Group, Inc. and Constellation Generation Group, Inc. (subsidiaries of Constellation Energy Group, Inc.) to the USDOE's Economic Dispatch Study dated September 1, 2005. For context, Constellation Energy Group, Inc. (CEG) is a Fortune 200 competitive energy company based in Baltimore, Maryland. Through its various affiliates, CEG is one of the nation's largest wholesale power suppliers and a major generator of electricity, with a diversified fleet of power plants strategically located throughout the United States.

Questions and follow up can be directed to the following individuals:

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Thank you for the opportunity to participate in this study.

Sincerely,

/s/

Michael D. Smith
Constellation Energy Commodities Group, Inc.

Responses of Constellation Energy Commodities Group, Inc.

Q1. What are the procedures now used in your region for economic dispatch? Who is performing the dispatch (a utility, an ISO or RTO, or other) and over how large an area (geographic scope, MW load, MW generation resources, number of retail customers within the dispatch area)?

A1. PJM Interconnection LLC performs economic dispatch via a security constrained unit commitment process for the majority of our generating capacity, which is located in the PJM footprint. PJM's procedures for economic dispatch are as described in PJM's tariff and business practices. We also have generating capacity in the Midwest ISO and New York ISO footprints, and the dispatch protocols of those market operators are consistent with those of PJM. In addition, we have generating assets in ERCOT and the California ISO (CAISO). In these markets, the economic dispatch protocol is different from the security constrained unit commitment process used in the eastern organized markets. For instance, CAISO requires a "balanced bilateral schedule" for all generation on both a day-ahead and an hour-ahead basis. The CAISO does, however, accept incremental and decremental bids that allow the CAISO to provide near real time (5 minute) dispatch instructions to move the unit off of its bilateral schedule and either purchase or sell the difference in energy produced compared to scheduled. ERCOT currently does not use an economic dispatch model in the day ahead market but does use a bid based market for balancing in real time, using large zones to manage commercially resolvable congestion. ERCOT relies primarily on the individual asset owners to run their assets in the most economic way that benefits the owner of the asset. ERCOT dispatches for local reliability in the form of Out of Merit Capacity/Energy (OOMc/OOMe), which do not consider economics as fully as the economic dispatch protocols in the eastern markets.

Q2. Is the Act's definition of economic dispatch (see above) appropriate? Over what geographic scale or area should economic dispatch be practiced? Besides cost and reliability, are there any other factors or considerations that should be considered in economic dispatch, and why?

A2. The Act's definition of economic dispatch seems appropriate. The geographical area and scale of economic dispatch should be as large as possible while ensuring system reliability. The dispatch should include the effect of losses and should include transmissions redispatch (LMP) for contingency/constraint control.

Q3. How do economic dispatch procedures differ for different classes of generation, including utility-owned versus non-utility generation? Do actual operational practices differ from the formal procedures required under tariff or federal or state rules, or from the economic dispatch definition above? If there is a difference, please indicate what the difference is, how often this occurs, and its impacts upon non-utility generation and upon retail electricity users. If you have specific analyses or studies that document your position, please provide them.

A3. In PJM and other organized markets, economic dispatch procedures are identical for all classes of generation, regardless of ownership. This is one hallmark of an organized RTO/ISO market, and it ensures that all generation assets in the market footprint are dispatched in the most efficient, least cost manner. In regions that do not have independently administered centralized dispatch, and ownership of power plants is split between utilities and non-utilities, the practice has been for utility operators to economically dispatch only the utility-owned generation and then to purchase generation from non-utility owned units, without economically dispatching them, to fill in identified supply gaps. Finally, it is relevant to note that one of the major differences in economic dispatch in various regions across the country is the number and treatment in each market of reliability must run “RMR” generation units and other similar processes that result in generating units being taken out of merit order dispatch. For example, Constellation sees significant impact of RMR and similar programs in all markets, but the New England and California markets display a particularly strong impact from these programs. Since economic dispatch is negatively impacted overall by RMR and similar contracts, their use should be minimized in any market, and in locations where they must exist, the life of those contracts must be limited.

Q4. What changes in economic dispatch procedures would lead to more non-utility generator dispatch? If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by non-utility generators, please explain the changes you recommend.

A4. The economic dispatch procedures in the established RTO/ISO markets are adequate to ensure non-utility generation assets are dispatched. The concern, then, is not with the security constrained unit commitment procedure used in organized markets but rather with the absence of those procedures in non-markets. Expanding those security constrained unit commitment procedures to include all units in the non-market areas—utility owned and non-utility owned alike—would bring significant benefits to consumers. Further, requiring control area operators in ERCOT and CAISO to engage in economic dispatch using protocols similar to those in the established markets would lead to more non-utility dispatch in those areas. In those markets, a change from a bilateral scheduling process to a day ahead clearing price mechanism would provide greater opportunity for non-utility owned assets to be dispatched and participate in these markets.

Q5. If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have – on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts? How would this affect retail customers in particular states or nationwide? If you have specific analyses to support your position, please provide them to us.

A5. In theory, if the non-utility generator's incremental cost is lower, greater dispatch of non-utility generation assets will lead overall to lower costs to customers. Using CAISO as an example, once the utilities no longer are scheduling to meet their load from their portfolio of assets under bilateral scheduling requirements, non-utility generation

owners will have a greater opportunity to dispatch on a pure economic dispatch signal. As to environmental impacts, since most new non-utility generators are state of the art gas fired units, increased economic dispatch of these units would in theory lower overall environmental emissions.

Q6. Could there be any implications for grid reliability – positive or negative – from greater use of economic dispatch? If so, how should economic dispatch be modified or enhanced to protect reliability?

A6. Economic dispatch in an LMP market complements and does not detract from grid reliability. In addition to providing market operators with additional generating units, flexibility and tools (like state estimators), many of the new non-utility generators also have the ability to ramp up faster and provide large amounts of regulation and load following capability, which help grid reliability.